Message

From: Magee, Melanie [Magee.Melanie@epa.gov]

Sent: 12/5/2013 5:46:38 PM

To: Tammy Lasater / FDDE [tammyl@fdde.fpcusa.com]

CC: Cheever, Robert [cheever.robert@epa.gov]

Subject: Formosa Plastic Corporation, Olefins Expansion Permit Application Questions

Tammy,

We are reviewing the permit application for the Olefins Expansion and have a few additional questions. I have listed our questions below and would appreciate a response to help in our review.

- 1) Please confirm that the emission calculations have been presented in metric tons. It appears that the calculation results have not been converted to short tons? We are double checking the calculations and have noticed a few minor differences in the numbers and would like to confirm. It may be helpful if we could have a copy of the excel spreadsheet that was used for the calculations so we can verify if it is just a rounding issue. We would also like to confirm the values in Table A-9 are expressed in short tpy or metric tpy.
- 2) Table A-6 provides an estimate of decoking emissions. Are these emissions a total for the two decoking drums combined? Or, are the emission totals for each decoking drum? Also, at the bottom of Table A, the following is included: Source Type –Furnace Decoke [3]. Does the [3] mean to indicate 3 units or should this indicate a reference to footnote 3?
- 3) Page 31 of the introduction mentions emergency engines. Please confirm if the emergency engines are new/modified or affected emission units. If so, please submit a BACT analysis for the new/modified units. Or, if the unit is modified, please submit the existing federally enforceable permit conditions associated with the emission unit.
- 4) Table A-5 notes "GHG emissions from flares" and includes the flare 1st stage and the elevated flare 2nd stage. Please confirm if Tables A-10 and A-11 are combined 1st and 2nd stage flares or separate. If separate, which table goes with which flare stage? Also, for Table A-10 and A-11 the column labeled GHG Mass Emissions, please specify which pollutant the mass units are referring to.
- 5) On Table A-5, for the flare gas data, please specify the higher heating values (HHV) for the elevated flare 1st stage, elevated flare 2nd stage and the low pressure flare.
- 6) The application does not appear to contain a BACT analysis for MSS? If this information was not included, please provide an analysis for MSS emissions.
- 7) The BACT analysis for the pyrolysis cracking furnaces notes that the primary fuel source is hydrogen-rich (low carbon) fuel gas. Please provide a fuel gas analysis for this fuel source.

Thanks, Melanie

Melanie Magee Environmental Engineer Air Permits Section (6PD-R) U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue Dallas, Texas 75202 (214) 665-7161